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ABSTRACT

The "Stepping Stones" board game has been developed as part of the Scotland Against Drugs School Program and is specifically intended for P1, P2 and P3 children and their parents. The game aims to promote discussion between parents and their children about early years drug education and health topics. Scotland Against Drugs (SAD) commissioned the Scottish Council for Research in Education to evaluate the pilot over the period July to November 2001. The evaluation used surveys to gather data from P1, P2 and P3 pupils (795 in total), their parents (487 in total) and relevant teachers in the pilot schools across the three local authorities. Group interviews were also used in three schools to further explore issues arising from the surveys. The main aim of the evaluation was to assess the suitability and effectiveness of the game, particularly in creating a forum for discussion between child and parent on the issue of early years drug education, and to make appropriate recommendations concerning any changes indicated by the findings. The evaluation findings strongly indicate that the "Stepping Stones" board game has met the aims and objectives set out for the pilot, particularly that of promoting discussion between P1-P3 children and their parents in early drug education. Three appendixes contain data on the sample and responses, an annotated pupil questionnaire, and an annotated parent questionnaire. (GCP)

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The Scottish Council for Research in Education

Evaluation of the Scotland Against Drugs

Stepping Stones

Board Game

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Evaluation of the *Stepping Stones* Board Game

Kevin Lowden

Paula Davidson

February 2002

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Executive summary

Introduction

The *Stepping Stones* board game has been developed as part of the Scotland Against Drugs School Programme and is specifically intended for P1, P2 and P3 children and their parents. The game aims to promote discussion between parents and their children about early years drug education and health topics. The game was piloted in certain primary schools in Angus, East Dunbartonshire and Inverclyde. Scotland Against Drugs (SAD) commissioned the Scottish Council for Research in Education to evaluate the pilot over the period July to November 2001.

The evaluation

The evaluation used surveys to gather data from P1, P2 and P3 pupils (795 in total), their parents (487 in total) and relevant teachers in the pilot schools across the three local authorities. Group interviews were also used in three schools to further explore issues arising from the surveys. The main aim of the evaluation was to assess the suitability and effectiveness of the *Stepping Stones* board game, particularly in creating a forum for discussion between child and parent on the issue of early years drug education, and to make appropriate recommendations concerning any changes indicated by the findings.

The findings

The evaluation findings strongly indicate that the *Stepping Stones* board game has met the aims and objectives set out for the pilot, particularly that of promoting discussion between P1-P3 children and their parents on early years drug education. We have seen that there is consensus across pupils, parents and teachers concerning the relevance and value of the game. An overview of the main findings is presented here under some of the main evaluation objective headings.

Creating a forum for discussion between child and parent on the issue of early years drug education

One of the main aims of the *Stepping Stones* board game was to facilitate a forum for discussion on health topics between parents and their children. The majority of pupils have played the game at least once and 36% have played it more than three times. Pupils played the *Stepping Stones* game with a range of people but mainly with their mother. Relatively few of them (12%) have played the board game with just their father. Most pupils (80%) were also eager to play the game again.

Importantly, 72% of pupils reported that they now felt more able to talk about health with those whom they had played the game with. The pupil discussion groups also found that, when playing the game, the question cards usually prompted discussion on the topics rather than merely eliciting a right or wrong response before moving on to another question card.

Our survey of parents also indicates that the game has had an impact on parent-child communication about health with only 4% of parents saying that they rarely or never discussed the topics on the game cards. Thirty-eight per cent of parents said there was always lots of discussion about the topics and 48% reported that there was sometimes lots of discussion about the game topics. Sixty-one per cent of parents claimed that they would now be able to talk more to their child about health-related topics because of the game.

Playing the *Stepping Stones* game was an enjoyable experience for most parents (86%) and three-quarters of parents were comfortable discussing the topics that arose during the game. This again suggests that there are unlikely to be strong barriers to parent–child communication on the topics covered by the game.

Developing children's knowledge and awareness of drug topics and promoting their ability to make positive choices

Pupils generally perceive that they have learned something new about health from the game (67%) and that it has helped them to learn how to stay healthy (73%). Seventy-seven per cent of pupils found the game interesting and 79% stated that it was fun to play. Pupils' comments during the P1-P3 group interviews reiterated these themes.

Parents were also positive in their views that pupils had learned something new about medicines/drugs from playing the board game (82%) and 73% agreed or strongly agreed that the game would help their child to make positive choices concerning their health. Half of the parents also thought that the *Stepping Stones* game had helped to promote closer links between parents and their school.

Headteachers and their teachers indicated that the *Stepping Stones* game was likely to have a positive impact on pupils' knowledge of drug facts and issues but stressed that the attitude of parents towards interacting with their children and towards the topics covered by the game could be an important factor. Efforts to support and encourage parents to use the game were seen by teachers as extremely important because of the importance of parents' attitudes towards talking with their children about the topics covered by the game.

Broadening parental understanding of what early years drug education involves

Over three-quarters of parents report being better informed (76%) about the nature of primary school drug education as a result of playing the *Stepping Stones* game. The same percentage report that the game has also helped to reassure them about what is being taught in primary school drug education. Sixty-eight per cent of the parents stated that there was no need for additional information or support concerning the topics covered by the game.

The relationship between the game and drug education content for P1-P3 in primary schools

Headteachers and teachers generally thought that the *Stepping Stones* resource reinforced the drug and health education content concerning 5-14 Health Education for primary 1, 2 and 3. The resource was seen as fitting well with what was being taught in schools' health education programmes for these age groups.

Participants suggestions for improving the* Stepping Stones *game

The most frequent suggestion from pupil, parents and teachers to enhance the game was to include a dice rather than the self-assembly card spinner.

Do parents require additional information and support to help them explore effectively the issues that arise from the game?

Few parents wanted additional support or information. Comments from those who required additional advice included: providing regular updates on drugs and drug education including using parents' evenings, providing additional facts on health and drugs geared to the P1-P3 age group and guidance on how to 'explain the dangers of drugs in a language that primary pupils will understand'.

Issues and recommendations

The consistently positive responses from pupils, parents and teachers concerning the suitability of the game for P1-P3 pupils and their parents strongly suggests that the game, with very minor modifications, should be introduced across all primary schools for these age groups. Issues and recommendations for the future development include:

- The counters were seen as attractive by pupils and parents but also as quite flimsy and awkward to construct. We would recommend considering whether cost-effective alternative versions of the counters could be provided.
- A small number of parents considered the game to be too short in duration and said that it was possible to play it without a counter landing on many of the question spaces. We would recommend considering strategies to lengthen the duration of the game.
- While a small number of teachers thought that the questions were too easy for some P3 pupils, teachers in schools where proportions of P1 and P2 pupils had literacy difficulties considered the wording of the cards to be too difficult for such children. We would recommend further investigation of the scale of this issue and what measures might address the needs of drug education needs of pupils with literacy problems.
- There were some issues concerning the distribution of games to the schools with three of the 12 schools experiencing some problems in getting the games. We would recommend closer monitoring of the distribution process and follow–up of schools to assess deliveries.

1 Introduction

1.1 Introduction

The *Stepping Stones* board game has been developed as part of the Scotland Against Drugs School Programme and is specifically intended for P1, P2 and P3 children and their parents. The game aims to promote discussion about early years drug education and health topics with parents. The game was piloted in schools across three Scottish local authorities: Angus (three schools), East Dunbartonshire (four schools, however, one school received sufficient games for only the P3 year group) and Inverclyde (four schools). Scotland Against Drugs (SAD) commissioned the Scottish Council for Research in Education to evaluate the pilot over the period July to November 2001.

In recent years there has been demand among schools for drug education resources for younger children. At the same time the role of parents in helping to promote their children's health has been recognised. It is within this context that the *Stepping Stones* game has been developed. The intention is that, following a favourable evaluation, the game could be made available to every P1-P3 pupil in Scotland. This means widening access to a resource that has the potential to reach younger primary school pupils and their parents and to encourage investigation of early years drug and health education.

The *Stepping Stones* game is based on the premise that young children learn a great deal through play and that the game can consolidate and reinforce learning in a fun and positive way. Also, SAD recognise that parents and the home environment have a strong influence on children's learning. The game attempts to involve parents to help their children to better understand drug issues. It includes questions that aim to develop knowledge, skills and understanding concerning early years drug education, and the more the game is played the more opportunities will arise for discussion of the questions. The game has also been designed to fit with the 5-14 National Guidelines.

The game comes in a cardboard box with an instruction/background leaflet, a playing board, self-assembly counters, spinner and question cards. Using the spinner to find out how many places she or he can move the player will proceed towards the finish. If s/he lands on a question space an early years drug/health question is read out for the child to answer and discuss with his/her parent.

1.2 The aims of the evaluation

The main aims of the evaluation were to assess the suitability and effectiveness of the *Stepping Stones* board game in the three local authorities and to make appropriate recommendations concerning any changes indicated by the findings. The specific evaluation objectives were:

- To evaluate the effectiveness of the *Stepping Stones* drug education board game in:

  - creating a forum for discussion between child and parent on the issue of early years drug education
  - reinforcing and developing children's knowledge and awareness in drug education
  - developing children's ability to make positive choices and take responsibility for these choices
  - broadening parental understanding of what early years drug education involves and helping to allay fears they may have about the teaching of drug education to young children.
- To assess whether the game is targeted at the appropriate age range.
- To assess whether there is merit in distributing the game to all P1–P3 children in Scotland.
- To examine whether changes are necessary to the game's design and distribution arrangements and to make suggestions on suitable alterations.
- To examine whether parents require additional information and support to help them explore effectively the issues that arise from any increased discussion on health and drugs that the game might stimulate.
- To examine the relationship between the game content and drug education content for P1-P3 in the primary schools and explore the extent to which the game reinforces school drug education.

1.3 Evaluation approach

Given the aims and objectives of the evaluation, the design of the study required an appropriate mix of quantitative and qualitative methods. The chosen methods were informed by successful SCRE approaches used in similar evaluations within primary school contexts. The main methods included:

- a representative survey of P1, P2 and P3 pupils across 9 of the 11 pilot schools in the three pilot authorities
- a representative survey of the parents of those pupils participating in the pilot
- a survey of the P1, P2 and P3 teachers whose pupils had participated in the pilot
- group interviews with pupils (1 x P1, P2 and P3 in one school in each of the three pilot authorities: a total of 9 pupil groups) to allow greater exploration of issues concerning the use of the game and pupils' perceptions on the game
- where possible, interviews with teachers whose pupils had participated in the pilot (1 group of P1-P3 teachers in one school in each of the three authorities: a total of 3 teacher groups) to explore in more detail some of the main foci of the evaluation. For example, *do teachers see the game as reinforcing what they teach.*

Taken together the evaluation components provided robust and generalisible findings as well as qualitative insights on the effective use of the game.

2 The findings

This section reports primarily on the findings from the pupil, parent and teacher surveys. Where appropriate, information gathered from the group interviews with pupils and teachers has been included to provide further insights on how the game was used and perceived (details of pupil and parents' responses are provided in Appendix 2A and 2B respectively).

2.1 Pupils and the *Stepping Stones* game

Nine of the eleven primary schools involved in the pilot were able to participate in the evaluation. A total of 795 pupils completed brief questionnaires on the *Stepping Stones* game, with responses from year groups being: P1 25%, P2 32% and P3 37% (a detailed breakdown of respondents is provided in Appendix 1).

2.1.1 Pupils' use of the game

Ninety-three per cent of pupils reported receiving the game and of these 98% still had the game at home at the time of the survey. Table 1 shows how often the pupils played the game.

Table 1: How many times have pupils played the game? (N=795)

Once	19%
Twice	14%
Three times	9%
More than three times	36%
Never	14%
No response	7%

Clearly, the majority of pupils have played the game at least once and 36% have played it more than three times. Also, most pupils (80%) emphasised that they wanted to play the game again.

One of the aims of the *Stepping Stones* board game was to facilitate a forum for discussion on health topics between parents and their children. Table 2 shows that pupils played the *Stepping Stones* game with a range of people but mainly with their mother, an older brother or sister and with both parents.

Table 2: Who have pupils played the Stepping Stones *game with? (N=795)*

Just Mum	35%
Just Dad	12%
Both Mum and Dad	27%
Grandma or Granddad	13%
An older brother or sister	32%
Another adult in your family	5%
A friend	12%
Someone else	8%

Note: Response total exceeds 100% because multiple responses were allowed

We can see that relatively few pupils (12%) have played the board game with just their father, the same proportion of responses as those who had played it with their friends. We could speculate that mothers are more likely to be involved with childcare and have more interaction with pupils of the age groups covered by this initiative. These findings also indicate the importance of older siblings in children's informal health education and development, and suggest that health initiatives could build on this relationship.

2.1.2 Pupils' views on the game

Seventy-seven per cent of pupils found the game interesting and 79% stated that it was fun to play with 70% stating that children in other schools should receive and use the *Stepping Stones* board game. This enthusiasm was borne out in pupils' comments during the P1-P3 group interviews where pupils were able to elaborate on what they liked about the game. In these groups, P1-P3 pupils commented on the game's ease of play, that the characters were fun and that they believed they were learning something from the experience. The game was seen as easily picked up and played without much setting-up. Also, pupils reported that it could be carried around to a friend's house.

The group discussions used a copy of the game to help promote discussion. Pupils were clearly excited and eager to play the game when they saw it again. This enthusiasm strongly suggests that the design of the game means that it is both accessible and engages with pupils in the P1-P3 age groups.

While the game was valued and enjoyed by most pupils, one of the aims of the initiative was to foster parent-child discussion of health issues. Seventy-two per

cent of pupils reported that they now felt able to talk more with those they played the game with about health. The pupil discussion groups also probed this issue in more detail and found that, when playing the game, the question cards usually prompted discussion on the topics rather than merely eliciting a right or wrong response before moving on to another question card.

In addition to promoting a forum for discussion between pupils and their parents or older siblings or relatives, pupils reported that they believe that they have learned something new about health from the game (67%) and that it has helped them to learn how to stay healthy (73%). As we will see, parents and teachers broadly agree with these perceptions of the pupils about the game.

2.2 Parents' views on the *Stepping Stones* game

Parents of those pupils who received the game were asked to complete a questionnaire to find out whether and how they had used it and to elicit their views on the game. In total, 487 parents responded. The majority of respondents were mothers (84%). Here we highlight the main findings from the parent survey and, where appropriate, draw on their own written comments to present further insight on their views.

2.2.1 Parents' views on distribution arrangements for the game

Ninety-two per cent of the parents had received the *Stepping Stones* board game, 90% of parents stated that the game had been sent home from school with their child. Most parents (89%) were happy with the distribution arrangements for the game. Additional comments from some indicated that they had some advance notice from the school about the game and were expecting it. Some respondents explained that their school had invited parents to attend a meeting where the game was introduced. This was welcomed because parents could ask questions about the game. More commonly, the school would send additional written information home with the game.

In all, 53% of parents reported receiving additional information about the game from their school. This varied from school to school but usually involved information in an endorsing covering letter from the school that usually explained how the game fitted into the health education programme of the school, how to introduce it to their child and ideas on playing the game. Parents also indicated that they found the SAD information leaflet that explained the rationale for the game helpful.

2.2.2 Parents' accounts of using the game

Fifty–two per cent of parents said that their child had played the game more than three times, 15% reported they had played the game twice and 11% had played it once. Only 3% had not yet played the *Stepping Stones* game. Of those who had played the board game, 96% had played the game through to the finish at least once, with 50% playing it through to the end more than three times.

One of the main aims of the *Stepping Stones* board game was to facilitate discussion on early years drug education and health. Our survey of parents indicates that the game has had an impact on parent-child communication about health with only 4% of parents saying that they rarely or never discussed the topics on the game cards. Thirty-eight per cent of parents said there was always lots of discussion about the topics and 48% reported that there was sometimes lots of discussion about the game topics. Sixty-one per cent of parents claimed that they would now be able to talk more to their child about health-related topics because of the game. Some parents explained in additional comments that they already felt able to discuss such topics with their children. Nevertheless, these findings indicate that the *Stepping Stones* board game has had a positive impact on parent–child communication concerning the topics covered by the game.

Three-quarters of parents were comfortable discussing the topics that arose during the game. This again suggests that there are unlikely to be strong barriers to parent-child communication on the topics covered by the game. The majority (89%) of parents thought that the game was easy to play with 86% stating that the game held the interest of their child and 88% said their child had fun playing the board game. Playing *Stepping Stones* was also an enjoyable experience for most parents (86%).

2.2.3 Parents' views on the benefits of the game

Parents demonstrated positive attitudes and perceptions towards the game. For example, 82% agreed or strongly agreed with the statement that their child had learned something new about medicines/drugs from playing the board game and 73% agreed or strongly agreed that the game would help their child to make positive choices concerning their health. Half of the parents also thought that the *Stepping Stones* game had helped to promote closer links between parents and their school.

The game appears to have informed over three-quarters of parents (76%) about the nature of primary school drug education with the same percentage reporting that the game has helped reassure them about what is being taught in primary school drug education.

Comments from the small proportion of parents who still required some reassurance about early years drug education included being anxious about whether their child was too young for discussing drug-related issues. One parent's comment illustrates another concern: that the topic of drug education sits uneasily with their views of the world of younger children but that the game is a useful way to begin the process of drug education:

> *It seems difficult to strike a balance between making kids informed and having them lose their natural innocence. The game provided a useful starting point and encouraged wider discussion.*
>
> P2 Parent

Other parents were reassured because the topics covered by primary school drug education were now seen to be more about staying safe and not about 'harder drugs'.

> *I feel totally reassured now as I thought the topics were a lot stronger about it in school.*
>
> P3 Parent

Support for the game strongly emerges from parents' responses with 84% agreeing that the game is a useful way for children to learn about health and 83% stating that they would recommend the game to other parents. Their additional comments emphasised their support for drug education at school and for initiatives like the *Stepping Stones* game. These comments also provided insights concerning the need for drug education at primary school level. For example, some parents highlighted their locality had high levels of illegal drug use, and therefore drug education was very relevant to help their children stay safe and make healthy choices.

> *Knowing the dangers at a young age can be more of an advantage than not knowing until high school.*
>
> P2 Parent

When asked to provide any final additional comments on the game, parents largely reiterated their support for the initiative with some thanking the development team for providing an easy-to-use resource that educated about drugs and health without frightening younger pupils. Parents sometimes noted that they were surprised about what their child already knew and that the game had helped establish a greater awareness about their child's level of knowledge.

One person had shown the game to a parents' group consisting of health visitors, N.C.S workers, nursery staff and other parents and it was very well received. Some suggested widening the idea to encompass older primary pupils. The format and ethos of the game was seen as very suitable for young primary pupils and some thought that it could be adapted for road safety and education on personal safety. These comments also reveal that some parents considered the game beneficial for their older children (10-year-olds) who had played the game with their younger child.

2.2.4 Parents' need for additional information and support

Sixty-eight per cent of the parents stated that there was no need for additional information or support concerning the topics covered by the game. Comments from those who said additional advice would be welcome included: providing regular updates on drugs and drug education including using parents' evenings to do this, providing additional facts on health and drugs geared to the P1-P3 age group and guidance on how to 'explain the dangers of drugs in a language that primary pupils will understand'.

I feel that my own knowledge of drugs misuse is very limited and that I need more information on how to tackle this subject with my children, so that I can be sure that they fully understand the dangers. It would be very beneficial if a guide for parents was available to help them understand the best way to teach small children about positive choices.

P1 Parent

2.2.5 Parents' suggestions for improving the game

The majority of parents (70%) stated that there were no improvements to the game that they could suggest. Most of the suggestions that were made related to making the spinner and, to a lesser extent, the counters more sturdy. Sometimes the spinner would tear when being assembled or was easily crushed by enthusiastic children. Some parents wondered whether those with less patience would bother with the time and effort of constructing a spinner and counters. Some parents queried whether every pupil required a game and suggested one per family might be sufficient and more cost-efficient.

As with pupils' comments, some parents said that they had used dice from other games. Other comments noted that the game could last longer as sometimes players got round very quickly or without landing on many question spaces. One parent suggested that the questions could contain references to 'older children and teenagers outside school who might offer drugs' and another suggested highlighting that some drugs could look like sweets.

2.3 Teachers and the *Stepping Stones* game

All headteachers and/or their assistant headteachers and 30 P1-P3 teachers in the nine evaluation schools completed questionnaires. This section also draws on the comments made by teachers interviewed in three schools (one in each pilot authority). Their responses provide insights on whether they see the game as complementing early years drug and health education as well as their views on the quality of the resource and what feedback they have received about the game.

2.3.1 Teachers' views on how the game relates to early years drug and health education

Headteachers and teachers generally thought that the *Stepping Stones* resource reinforced the drug and health education content concerning 5-14 Health Education for P1-P3. The resource was seen as fitting well with what was being taught in schools' health education programmes for these age groups.

The game contains the same health and PSE messages as the school programme and therefore supports and consolidates work done in the school.

Headteacher

The game also received the support of teachers and their management concerning its appropriateness for the targeted age groups of pupils. One teacher did think that some questions were 'too easy' for her P3 pupils. Overall, the initiative was seen as 'very worthwhile' and a number of teachers and headteachers thought something similar should be implemented for P4-P7.

2.3.2 Teachers' comments on the design of the game

Most teachers and headteachers reported that the game was well designed as an educational resource. However, some teachers noted that they understood their role in the process as mainly passing out the games to pupils and, therefore, did not have a detailed knowledge of the game contents.

Those headteachers and teachers who had received feedback from pupils and parents commented that this had mainly been positive. Some suggestions were made concerning improving aspects of the design and these were usually limited to the game's spinner. Teachers noted that because the spinner had to be made up and was quite flimsy, parents and their children often replaced it with dice from their other games.

In one school, class teachers had used the game as a resource as part of their health education and found that a number of P1 pupils had difficulty with reading the cards. These teachers suggested that some thought could be given to the wording bearing in mind that some P1 pupils can have very limited literacy abilities.

2.3.3 Teachers' views on the likely impact of the game

Headteachers and their teachers were positive in their comments on the likely impact of the *Stepping Stones* game but added that the attitude of parents towards interacting with their children and towards the topics covered by the game could be a factor. Most of them thought that it would promote discussion between P1-P3 pupils and their parents on health topics related to early years drug education. They also considered it likely that the game would have a positive impact on pupils' knowledge of early years drug education topics and on their ability to make healthy choices.

> *It is a good starting point for drugs education...it reinforces school-home partnerships...The children seemed to enjoy playing the game and it is an ideal way to get the message across.*
>
> P2 Teacher

Interestingly, in contrast to the majority of parents, most headteachers and teachers thought that the potential of the game could be further enhanced by providing parents with further support and information to allow them to discuss topics that the game might stimulate. Some schools have introduced the game to parents using a parent's evening or meeting to discuss the game and provide guidance on using the game. Other teachers thought that introducing the

game to parents in this way would be beneficial but getting parents to attend such meetings was not always easy for every school.

Efforts to support and encourage parents to use the game were seen by teachers as extremely important because of the importance of parents' attitudes towards talking with their children about the topics covered by the game. Parents' levels of knowledge about the topics that the game could raise and their confidence to engage in related discussions meant that any measures that could improve parent's confidence would be welcomed. Suggestions made by teachers included providing leaflets with the game on current thinking and knowledge related to the card topics. These should be easy to understand and provide accurate information to help parents discuss topics and, where necessary, to give accurate information (for example what to do if one finds a syringe).

Another positive impact of the game was seen by many teachers was helping to promote closer links between the school and parents. Other teachers thought that their school already had good links with parents and that this would, in turn, promote the use of the game.

2.3.4 Teachers' views on the distribution arrangements

The distribution arrangements were the only aspect of the game that received some level of criticism. One headteacher noted that there was insufficient time given to meet the deadlines of the pilot programme because the games were late in arriving.

Some headteachers thought that teachers should have had more opportunity to view the game prior to its distribution. Some teachers had little idea of what the game consisted of because they had not been able to acquire a 'spare' copy to examine. One headteacher considered that it was wasteful to provide each child with a game when one per family would suffice. There had been some confusion in the distribution of games to the pilot schools. One school received its consignment late, another only received enough for one year group and these were given to P3 pupils, and a third did not receive its games at all.

2.3.5 Teachers' views on improving the game

The most common suggestion for improving the game was again related, to providing a dice rather than a self-assembly and 'flimsy' spinner. Teachers' comments also included suggestions for improving the carriage of the game home by younger primary pupils. For example, taping carrier bags containing the game to ensure P1 pupils did not drop parts of the game out of the box on the way home.

2.4 Conclusion

The evaluation findings strongly indicate that the *Stepping Stones* board game has met the aims and objectives set out for the pilot, particularly that of promoting discussion between P1-P3 children and their parents on early years drug education. We have seen that there is consensus across pupils, parents and teachers concerning the relevance and value of the game. The pupils involved in the pilot were very enthusiastic about the design of the game and its topic. Parents were equally positive, seeing the initiative as timely and useful in providing the basis to promote discussion about early years drug and health issues.

There are no major changes suggested by respondents. Rather, there is consensus that the card spinner could be replaced with a dice and that some consideration be given to making the counters easier to assemble and less flimsy. The majority of parents are happy with the guidance and information provided with the game but there is evidence that some lack confidence and would like further advice on how to raise and discuss the types of topics covered by the game.

3 Issues and recommendations

Our evaluation has shown that P1-P3 pupils and their parents value the *Stepping Stones* board game. Headteachers and teachers of P1-P3 pupils also view the game as a useful resource that can help promote parent-child communication about early years drug education and health issues. Our evaluation has highlighted a number of issues and related recommendations for consideration that can inform the future development of this resource.

3.1 Issues emerging from the evaluation

Our findings highlight that pupils are most likely to play the game with their mothers (only 12% have played the board game with their fathers). We can speculate that this reflects existing gender roles where mothers are more likely to help pupils with homework and other activities brought home from school. However, we can ask how important is it for children's health education and development that initiatives like the *Stepping Stones* game attempts to involve more fathers and male carers?

Our pupil interviews highlight that in some cases pupils also play the *Stepping Stones* game with their brothers and sisters and friends, and a minority play it *only* with their siblings. What implications does this have for promoting pupils' drug and health knowledge? For example, there is a greater likelihood that any myths and inaccuracies will persist if pupils only play the game with their siblings and friends.

3.2 Main recommendations

Given the overall satisfaction with the game by pupils, parents and teachers there are few recommendations.

3.2.1 Modifications to the game materials and content

Most respondents thought the overall design of the game was good. However, there was consensus on what materials required re-thinking.

- The most frequent suggestion made by parents, teachers and pupils concerning improving the game was to provide a plastic dice rather than the card, self-assembly spinner. Pupils and parents noted that the card spinner was prone to tear on construction and bend during play. Dice from other games was often used in place of the spinner provided with the game. We would recommend replacing the spinner with a dice. This might have cost implications but perhaps this should be balanced against the possibility that in some households parents might be more likely to ignore the game if it requires some effort to assemble and set up. It is arguable that it is these families that require such an intervention most.

- The counters were seen as attractive by pupils and parents but also as quite flimsy and awkward to construct. Some teachers queried whether less enthusiastic parents would bother making these game pieces. We would recommend considering whether cost-effective alternative versions of the counters could be provided.
- A small number of parents considered the game to be too short in duration and said that it was possible to play it without a counter landing on many of the question spaces. We would recommend considering strategies to lengthen the duration of the game (for example lengthening the 'route' to the finish space and/or increasing the number of question cards).
- While a small number of teachers thought that the questions were too easy for some P3 pupils, teachers in schools where proportions of P1 and P2 pupils had literacy difficulties considered the wording of the cards to be too difficult for such children. The fact that parents can read out the questions to pupils will address this issue to some extent. However, we would recommend further investigation of the scale of this issue and what measures could address the drug education needs of pupils with literacy problems.

3.2.2 Distribution of the game

Generally, parents and teachers were satisfied with the distribution arrangements for the game. However, some minor procedures could enhance how the game is distributed.

- Sometimes pupils are eager to open their games immediately or when travelling home, also the box can work open when in transit from school. We would recommend that if pupils are taking the game home from school then sealing the game box and carrier bag could help stop the box being opened and pieces lost before it is played.
- The majority of parents were satisfied with the distribution arrangements for the game. Parents who had attended events or meetings held by a school to introduce the game found this very useful, reporting that it afforded an opportunity to discuss how to introduce the topics with their children and address any other questions they had. Teachers highlighted that not all, or even a representative range of parents will attend such events, but that nevertheless, introducing the game in this way increases its profile and provides useful additional information. We would recommend that schools be encouraged to consider using events to introduce the game to parents.
- There were some issues concerning the physical distribution of the game to schools with one pilot school not receiving any games, another receiving limited numbers of games and a third receiving them late. Distribution of resources on this scale can often be fraught with problems such as communication and delivery. We would recommend that in any 'scaled-up' future distribution of the game that the carrier firm, operation and deliveries be more closely monitored. Schools also, should be encouraged to report any delay in deliveries.

- Class teachers often commented that they were unaware of the content of the games as they had just been asked to help distribute the games. The resource is intended mainly for use with parents and children. However, we would recommend providing opportunities for teachers to be more aware of the nature and aims of the game as they could help address any emerging issues or queries that pupils bring back to school after playing the game.

3.2.3 Additional advice for parents

In contrast to the views of teachers, the majority of parents felt that they required no additional advice or support to play the game with their children. However, a minority perceived their own knowledge of certain drug-related topics covered by the game was limited. These people thought more information could be provided through the school and focusing on how to cover drug issues with younger children and how to promote positive choices. We would recommend developing and providing optional information and guidance on these issues for parents, or indicating in the game where such information can be obtained (for example, telephone numbers and web pages of useful organisations).

3.2.4 Adapting the game for older primary pupils

A theme arising from parental responses and some of the teacher interviews was that a similar initiative could be developed for use with older primary pupils. We would recommend a brief feasibility study into whether a similar resource to the *Stepping Stones* game could be developed for P4 pupils and older. Issues for consideration could include what types of questions and presentation would be appropriate for older pupils.

APPENDIX 1: SAMPLE AND RESPONSES

The game was piloted in schools across three Scottish local authorities: Angus (three schools), East Dunbartonshire (four schools, however, one school received sufficient games for only the P3 year group*) and Inverclyde (four schools). The evaluation brief required robust and generalisable findings concerning levels of satisfaction with the board game and how parents and children used it. This meant a largely quantitative approach was adopted but additional insights concerning how pupils and parents used the game were obtained through interviews. The main methodological approach used to meet the objectives of the evaluation and responses for each strand is detailed below.

Evaluation method	Responses	Comments
Quantitative strand		
Survey of P1-P3 pupils across 9 of the 11 schools that received the games. A brief proforma was completed by pupils in the classroom and usually with the assistance of teachers and classroom assistants.	795 pupils	This represents 71% of all pupils who received games (1120) across the pilot schools. There were equal proportions of male and female respondents.
Survey of parents of those pupils completing questionnaires. A brief questionnaire was sent home with pupils for parents to complete	487 parents	Of the possible 795 parents who could have returned questionnaires 487 giving a 43% response rate. While not as high as the pupil response rate, it is respectable given the often very low levels of returns from parents in other surveys. Interestingly, the majority of respondents were mothers (84%).
A survey of all headteachers/ assistant headteachers and P1-P3 teachers across the nine evaluation schools completed questionnaires	9 headteachers/ assistant headteachers 30 P1-P3 teachers	This represents all headteachers and teachers associated with the board game in the 9 schools involved with the evaluation.
Qualitative strand (involving 1 school in each of the 3 authorities)		
Group interviews with P1-P3 pupils in 1 school in each of the 3 authorities	10 pupil groups (2 P1, 2, P3 and 6 P3 groups)	The evaluation team were unable to conduct pupil group interviews in 1 of the 3 schools due to illness. In one school the P3 teacher found it more convenient for the researcher to work with 3 groups within class rather than extract 1 group, hence more P3 groups.
Interviews with P1-P3 teachers, in 1 school in each of the 3 authorities. If possible during school hours or by telephone.	3 headteachers and 6 teachers whose pupils had received the game.	Headteachers in the 3 schools selected for qualitative work provided information either face to face or over the telephone. Across the 3 schools relatively few P1-P3 teachers reported being familiar enough with the game to pass comment on it.

* This one school returned the P3 questionnaires too late for inclusion to the analysis. However, the responses from pupils, parents and teachers were in line with the findings described in Section 2 of this report.

SCRE
The Scottish Council for Research in Education

Your views on the *Stepping Stones* board game

In the past few weeks you should have been given a board game called *Stepping Stones* to take home to play with your parents or carers.

We would really like to know what you think about this game and whether you have used it yet.

N = 795

About you

Q1 What school year are you in? *Please tick one box*

I am in.... P1 25% P2 32% P3 37% No response 5%

Q2 Are you a boy or a girl? Please tick one box

I am a.... Boy 48% Girl 46% No response 6%

The Stepping Stones board game

Q3 Did you or your parents get a *Stepping Stones* board game to take home?

Yes 93% No 1% Don't know 0% No response 6%

*If you **have not** had a Stepping Stones game at home please finish here and give these questions to your teacher.*

*If you **have** the Stepping Stones game at home please answer the rest of the questions.*

Q4 Do you have the *Stepping Stones* game at home now?

Yes 98% No 1% No response 1%

Q5 How many times have you played the *Stepping Stones* board game with your Mum, Dad or other adult? *Please tick one box*

Once	19%
Twice	14%
Three times	9%
More than Three times	36%
Never	14%
No response	7%

Q6 Would you like to play the *Stepping Stones* board game again? *Please tick one box*

Yes 80% No 6% No response 14%

Q7 Please put a tick next to any of the people that you have played the *Stepping Stones* board game with.

Just Mum	35%
Just Dad	12%
Both Mum and Dad	27%
Grandma or Granddad	13%
An older brother or sister	32%
Another adult in your family	5%
A friend	12%
Someone else	8%

Please tell us who ✍ _____

Q8 What do you think about the *Stepping Stones* game?
Please tick Yes or No

The *Stepping Stones* board game is interesting

Yes 77% No 7% No response 16%

I learned something new from playing the *Stepping Stones* board game

Yes 67% No 16% No response 17%

Playing the *Stepping Stones* board game will help me learn to stay healthy

Yes 73% No 9% No response 18%

I will now be able to talk more to those I played the game with about my health

Yes 72% No 10% No response 18%

The *Stepping Stones* board game is fun

Yes 79% No 4% No response 17%

Q9 Do you think that children in other schools should use the *Stepping Stones* board game? *Please tick one box*

Yes 70% No 4% Don't Know 9% No response 17%

Q10 Please write in anything else that you would like to tell us about the *Stepping Stones* board game

Or

Use the back sheet to draw a picture of yourself playing the *Stepping Stones* board game?

When you are finished the teacher will collect this question sheet and send it back to us.

Thank you for your help with our research.

Kevin Lowden, Paula Davidson, Janet Powney.
The Scottish Council for Research in Education
15 St John Street, Edinburgh EH8 8JR

Evaluation of the *Stepping Stones* board game

Some questions for parents

Recently, your child will have received through the school, a board game called *Stepping Stones* to take home to play with you. Scotland Against Drugs (SAD) produces the game and they have asked our organisation, the Scottish Council for Research in Education (SCRE), to evaluate their game.

- We would be very grateful if this questionnaire could be completed by the parent or guardian who has played the *Stepping Stones* board game with their child
- When you have answered all the questions place the questionnaire in the envelope provided.
- Please then give the envelope to your child to take to his/her teacher who will then send it directly to us.

We would be very grateful if you could return the completed questionnaire to the school by 24 October 2001.

All responses are confidential and no individual or school will be identified in any report we write.

If you have more than one child at the school who has received the *Stepping Stones* board game and you have, therefore received more than one of our questionnaires, please fill in just one for the child who has the next birthday (This will help us get a mix of pupils).

Thank you for your help with our research

KJ Lowden

Kevin Lowden
Research Officer

About you N = 487

Q1 What relationship are you to the child? *Please tick one box*

Mother	84%
Father	8%
Carer/Guardian	1%
Other	0%
No response	7%

Please specify: ✍ _____

Q2 What school does your child attend?

✍ _____ Primary School

The Stepping Stones Game

Q3 Do you now have, or have you had, the *Stepping Stones* board game in your house? *Please tick one box*

Yes 92% No 0% Don't Know 0% No response 8%

If you answered Yes, please complete the rest of the questions

If you answered No or Don't Know, please go to Q17

Q4 How did the school provide the game? Was it:
Please tick one box

Sent home from school with your child	90%
Handed to you by a teacher	0%
Presented to you at a parent event at the school (e.g. a parent's evening or afternoon)	2%
A responsible adult collected it for you	0%
Some other way	0%
No response	8%

Please tell us how: ✍_____

Q5 Do you think that the distribution arrangement for the *Stepping Stones* board game is suitable? *Please tick one box*

Yes 89% No 2% No response 9%

Please comment: ✍ _____

_____

Q6 When you received the game, did the school provide any additional information or advice about its use? *Please tick one box*

Yes 53% No 24% Don't Know 11% No response 12%

If Yes: Please tell us what advice or information you received and whether this was useful:

✍ _____

_____

Q7 Has your child been able to play the *Stepping Stones* game yet? *Please tick one box*

Yes once	11%
Yes twice	15%
Three times	11%
More than three times	52%
No	1%
Not yet	2%
No response	8%

Q8 Did you and your child usually play the game through to the finish? *Please tick one box*

Yes once	13%
Yes twice	17%
Three times	11%
More than three times	45%
No	3%
Not yet but intend to	3%
No response	8%

Appendix 2B-3

Q9 When your child played the *Stepping Stones* game, was there a lot of discussion about the topics on the cards? *Please tick one box*

Yes always 38% Sometimes 48% Rarely 3% Never 1%
No response 10%

Q10 Did you feel comfortable with the discussion that occurred about the topics on the cards? *Please tick one box*

Yes always 75% Sometimes 14% Rarely 1% Never 0%
No response 10%

Q11 Please tell us whether or not you agree with the following statements *Please tick one box on each line*

	Strongly agree	Agree	Disagree	Strongly Disagree	Don't know	No response
My child showed interest whilst playing the *Stepping Stones* game	38%	48%	3%	1%	10%	11%
My child has learned something new about medicines/drugs from playing the *Stepping Stones* board game	29%	53%	5%	1%	2%	10%
I feel the *Stepping Stones* board game will help my child to make positive choices concerning their health	22%	5%	7%	1%	10%	9%
I will now be able to talk more to my child about my health because of the *Stepping Stones* board game	12%	49%	20%	2%	7%	9%
It was easy to use the *Stepping Stones* board game	42%	47%	1%	0%	1%	9%
My child had fun while playing the *Stepping Stones* game	41%	47%	2%	0%	1%	9%
I found playing the *Stepping Stones* game enjoyable	26%	60%	3%	0%	1%	1%
I think that the *Stepping Stones* game is a useful way for children to learn about health	39%	46%	4%	0%	1%	9%
I would recommend the *Stepping Stones* game to others	39%	45%	2%	0%	4%	9%
Since playing the game, I now know more about what is taught in primary school drug education	25%	51%	8%	1%	6%	9%

Q12 Since playing the *Stepping Stones* board game do you feel that you require any further information or support about the topics covered in the game? *Please tick one box*

Yes 9% No 68% Don't Know 11% No response 12%

If Yes: What further information or support would you like?

✍ _____

Q13 Since playing the *Stepping Stones* board game do you feel reassured about what is being taught in primary school drug education? *Please tick one box*

Yes 76% No 3% Don't Know 10% No response 11%

Please comment: ✍ _____

_____

Q14 Do you think that the *Stepping Stones* board game has helped to promote closer links between the school and parents? *Please tick one box*

Yes 50% No 18% Don't Know 22% No response 10%

Q15 Would you recommend the *Stepping Stones* board game to other parents? *Please tick one box*

Yes 83% No 3% Don't Know 5% No response 9%

Q16 Are there any changes or improvements you would like to see to the *Stepping Stones* board game content design?

Yes 16% No 70% No response 14%

If Yes: What would these changes be?

✍ _____

_____

Q17 **Only for those parents who have not received the *Stepping Stones* board game**

Please tell us why you have not received the *Stepping Stones* board game

✍ _____

_____

Q18 Please write in anything else that you would like to tell us about the *Stepping Stones* board game

✍ _____

_____

Can you please now place this questionnaire in the envelope provided and give it to your child to return it to his/her teacher at school. The school will then send all questionnaires to us.

Thank you for your time and assistance with our evaluation

Kevin Lowden, Paula Davidson, Janet Powney.
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U.S. Department of Education
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